November 6, 1945

Dr. Seeley G. Mudd
1206 Pacific Mutual Building
Los Angeles, California

Dear Seeley:

I was pleased to learn from your letter of November 1 that you have been appointed a member of the Medical Advisory Committee to aid in the allocation of the Life Insurance Medical Research Fund to suitable fundamental and applied research projects in heart and blood vessel diseases. I am also pleased and flattered that you should write to me in connection with this matter.

I have not carried out any work which bears at all on the problem of cardiovascular diseases. Moreover, our laboratories are so crowded, and will continue to be so crowded for another year, that I believe it would not be possible for us to begin such a program very soon. I am accordingly not taking advantage of your invitation to submit a research program of this sort for the coming year.

There is one idea about a research program in a somewhat related field on which I would like to have your advice. I have noted with interest that sodium salicylate has been used with some success in the treatment of acute rheumatic fever. The action of the salicylate, in sufficient concentration in the blood, is to decrease the sedimentation time of the red cells. I have the feeling that the damage done in acute rheumatic fever is the result of a change in the proteins in the plasma of such a nature that the erythrocytes become coated with protein, in such a way as to cause them to stick together, and that the action of salicylate is to inhibit this effect. It has occurred to me that it might be well worth while to carry on a laboratory investigation of the effect of very many substances, in particular those like salicylate which are known to interact strongly with protein, in order to find out which substances or which mixtures of substances are most effective in decreasing the sedimentation rate of red cells in blood which has a high sedimentation rate. One of the problems in which we are interested is this one of the effect of proteins and other materials in the blood on the sedimentation rate; we would like to get an understanding of this phenomenon. Do you think that this idea is a good one?

With best regards, I am

Cordially yours,

LP:gw

Linus Pauling